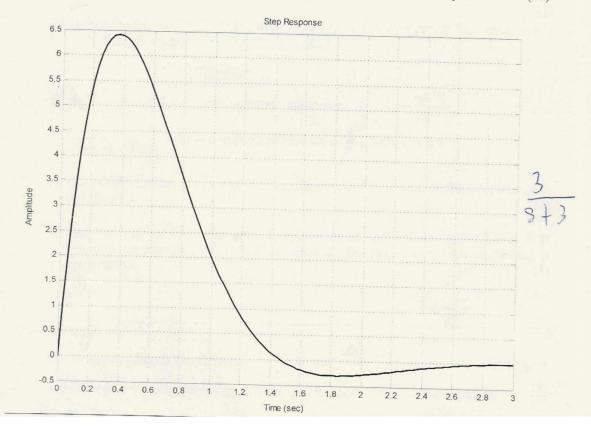
d) Given  $P = \frac{1}{s/3+1}$ , obtain a second order model for  $T_{Y/Di}$  (transfer of input disturbance to plant output with feedback) to satisfy the following regulating requirements for a step input disturbance of height 15 units. Estimate  $\zeta$  from the shape of the response. (10)



12) 24 th